

Claims

1 **Claim 1.** A parachute, comprising:
2 a circularly shaped canopy having a skirt band; and
3 a plurality of main suspension lines connected to the skirt band;
4 wherein each main suspension line includes a lower main
5 suspension line segment that branches into at least two upper main
6 suspension line segments.

1 **Claim 2.** A parachute as recited in claim 1, wherein the parachute
2 includes ten main suspension lines having ten lower main suspension line
3 segments and twenty upper main suspension line segments.

1 **Claim 3.** A parachute as recited in claim 2, wherein with the canopy
2 descending vertically and fully inflated, the ten main suspension lines
3 converge downwardly from the skirt band toward a suspension line
4 junction.

1 **Claim 4.** A parachute as recited in claim 1, further comprising:
2 a vent band on the circularly shaped canopy; and
3 a plurality of vent suspension lines connected to the vent band;
4 wherein each vent suspension line includes a lower vent
5 suspension line segment that branches into at least two upper vent
6 suspension line segments.

1 **Claim 5.** A parachute as recited in claim 4, wherein the parachute
2 includes ten vent suspension lines having ten lower vent suspension line
3 segments and twenty upper vent suspension line segments.

1 **Claim 6.** A parachute as recited in claim 5, wherein with the canopy
2 descending vertically and fully inflated, the ten vent suspension lines
3 converge downwardly from the vent band toward a vent centerline.

1 **Claim 7.** A parachute as recited in claim 1, further comprising means for
2 slowing the opening of the canopy, including a generally planar reefing
3 device defining a plurality of openings through which the main suspension
4 lines extend.

1 **Claim 8.** A parachute, comprising:

2 a circularly shaped canopy having a skirt band and a vent band;

3 a plurality of ten main suspension lines connected to the skirt band,
4 each main suspension line including a lower main suspension line
5 segment that branches into at least two upper main suspension line
6 segments, said ten main suspension lines extending from the skirt band
7 to a suspension line junction; and

8 a plurality of vent suspension lines connected to the vent band,
9 each vent suspension line including a lower vent suspension line segment
10 that branches into at least two upper vent suspension line segments, said
11 ten vent suspension lines extending from the vent band to a vent
12 centerline that extends to the suspension line junction.

1 **Claim 9.** A parachute as recited in claim 8, further comprising means for
2 slowing the opening of the canopy, including a generally planar reefing
3 device defining a plurality of openings through which the main suspension
4 lines extend.

1 **Claim 10.** A reefing device for slowing the opening of the canopy of a
2 parachute having a plurality of main suspension lines, the reefing device
3 comprising:

4 five strip segments that are arranged in a five-point star
5 configuration having five strip segment junctions uniformly spaced apart;
6 and

7 five eyelets, each of the eyelets extending through a respective one
8 of the five strip segment junctions to form five suspension-line-receiving
9 openings.

1 **Claim 11.** A reefing device as recited in claim 10, wherein the strip
2 segments are portions of a nylon strap that is folded into the five strip
3 segments.

1 **Claim 12.** A reefing device as recited in claim 10, wherein the five strip
2 segments are of uniform length.

1 **Claim 13.** A parachute, comprising:
2 a circularly shaped canopy having a skirt band; and
3 a plurality of main suspension lines connected to the skirt band;
4 wherein each main suspension line includes a lower main
5 suspension line segment that branches into at least two upper main
6 suspension line segments; and
7 wherein the lower suspension line segment is at least partially
8 composed of a first material and the two upper main suspension line
9 segments are at least partially composed of a second material that is
10 dissimilar to the first material.

1 **Claim 14.** A parachute as recited in claim 13, further comprising:
2 a vent band on the circularly shaped canopy; and
3 a plurality of vent suspension lines connected to the vent band;
4 wherein each vent suspension line includes a lower vent
5 suspension line segment that branches into at least two upper vent
6 suspension line segments; and
7 wherein the lower vent suspension line segment is at least partially
8 composed of a first material and the two upper vent suspension line
9 segments are at least partially composed of a second material that is
10 dissimilar to the first material.